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Anthracnose of *Osmanthus fragrans*[1]

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INTRODUCTION: *Osmanthus fragrans* (Thunb.) Lour. (fragrant olive, sweet olive, tea olive) is a popular evergreen ornamental shrub, known particularly for its fragrant flowers which are used in Asia to add a scent to tea (Bailey 1976). Among the leaf spot diseases reported on this host is anthracnose, caused by the fungus *Colletotrichum gloeosporioides* (Penz.) Penz. & Sacc. *[Glomerella cingulata* (Stoneman) Spauld. & H. Schrenk, teleomorph (Alfieri *et al.* 1994)]. This fungus is one of the most common plant pathogenic fungi in the world (Sinclair *et al.* 1993). It is particularly aggressive on plants weakened by environmental stress or senescence. The fungus may cause a multitude of symptoms including leaf spots and blights, cankers, twig dieback, and death on hundreds of different annual and perennial plant species.

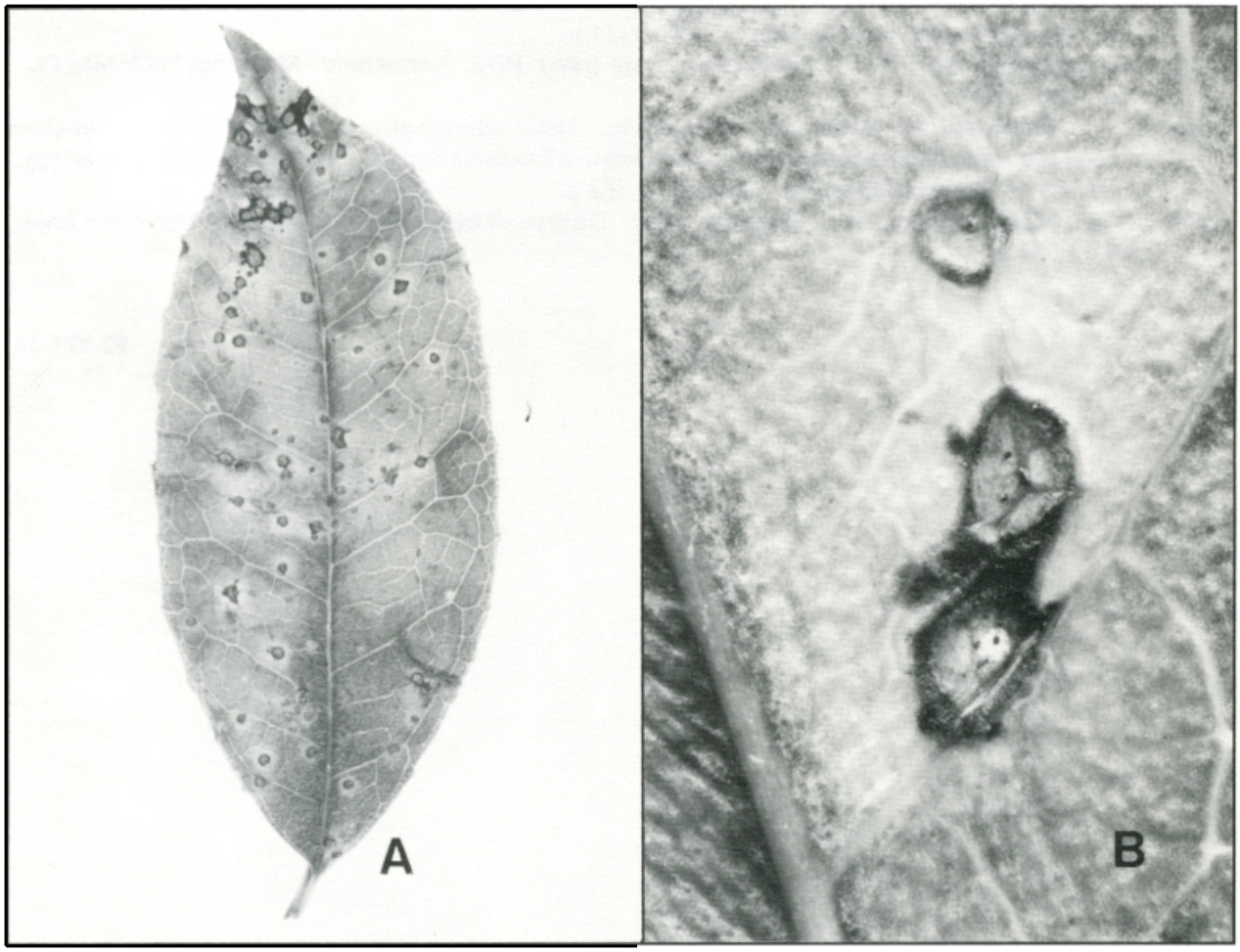

Fig. 1. (A) Osmanthus leaves with lesions caused by *Colletotrichum gloeosporioides.* (B) Anthracnose lesions showing characteristic black fruiting structures. Photography credit: Jeffrey W. Lotz. Specimen submitted by Flewellyn Podris.

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SYMPTOMS: On *Osmanthus fragrans,* minute (ca. 0.5 mm diameter) dark spots occur on the leaves (Fig IA). In the center of the spots, acervuli (fruiting structures) containing dark sterile hairs (setae) are frequently observed (Fig. 1B). Pinkish (salmon-color) masses of spores (conidia) can be so abundant that they may hide the structures.

DISEASE DEVELOPMENT: Conidia are spread by splashing rain and by insects. Spores germinate within 5-12 hours under warm (24°-29°C) wet conditions. The fungus may remain dormant near the point of host infection until conditions for disease development become more favorable; then, it may spread rapidly.

CONTROL: Thiophanate methyl as well as a combination of chlorothalonil and thiophanate methyl are registered for control of this disease (Simone *et al.* 1993).

SURVEY AND DETECTION: Look for small tan leaf spots with dark fruiting structures in the center. A hand lens may be necessary to detect acervuli, characteristic setae, and masses of salmon-colored spores.

LITERATURE CITED

Alfieri, S.A. Jr., K.R. Langdon, J.W. Kimbrough, N.E. El-Gholl, and C. Wehlburg. 1994. Diseases and disorders of plants in Florida. Florida Department of Agriculture and Consumer Services, Division of Plant Industry, Gainesville. Bulletin No. 14. 1114 p.

Bailey, L.H. (compiler), Staff of L.H. Bailey Hortorium (rev.) 1976. Hortus third. Macmillan Publishing Co., New York. 1290 p.

Simone, G., T. Kucharek, M. Elliott, and R.S. Mullin. 1993. Florida plant disease control guide. Institute of Food and Agricultural Services, Florida Cooperative Extension Service, Department of Plant Pathology, University of Florida, Gainesville. Volume 1. 362 p.

Sinclair, W.A., H.H. Lyon, and W.J. Johnson. 1987. Diseases of trees and shrubs. Cornell University Press, Ithaca. 574 p.

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